TRANSPORTATION

INTRODUCTION

The goals of Baltimore County's transportation strategy are to provide and maintain the infrastructure that supports the diverse travel needs of county citizens and visitors, foster responsible land use decisions, and provide for the county's economic growth strategies. Land use and the transportation system must be coordinated to ensure that the system and land use are compatible and that the system can accommodate the potential travel demands placed upon it.

Baltimore City developed in the classic radial "star" pattern, which laid the framework for the development of Baltimore County. Radial arterial highways – such as Baltimore National Pike, Liberty Road, Reisterstown Road, York Road, Belair Road, and Pulaski Highway – provide radial access to the county. The Baltimore Beltway (I-695), the county's circumferential connector, is designed to carry large volumes of high-speed traffic. The arterial highways provide the "spokes" of the "beltway wheel" and allow for through trips into Baltimore City. Collector roads provide the link between the arterial network and local streets. Interstates I-83 and I-95 provide access to the north and south, while I-70 provides access to the west.

The Baltimore Beltway provides the circumferential connection of the county's radial roadway network.

In addition to roadways, the transportation system also consists of transit services provided by the state, county, and the private sector. The state provides Mass Transit Administration (MTA) services consisting of fixed route bus service, express bus routes, paratransit service for people with disabilities, light rail, Maryland Rail Commuter (MARC), and the Baltimore

Metro (subway-heavy rail) (Maps 12, 13, and 14). Dedicated freight rail lines also operate within the county. Baltimore County sponsors CountyRide, a paratransit service, which provides transportation for people with disabilities, seniors, and citizens living in the county's rural areas. A number of private sector firms also provide paratransit services in the county.

Baltimore County's 173 miles of shoreline provides water access for business and recreation use. The Port of Baltimore is an integral part of the economic development strategy of the state and the Baltimore region (Map 14). Although the majority of the port facilities are located in Baltimore City, the Bethlehem Steel complex, Dundalk Marine Terminal, and certain storage warehouses are located within the county. The county's transportation infrastructure is instrumental in moving goods shipped through the port.

Martin State Airport is a major facility with approximately 120,000 flight operations per year. Large corporations such as Black and Decker, McCormick & Co., and Lockheed Martin use the airport for corporate travel needs. The Baltimore County Marine Police, Baltimore City Police, Air National Guard, Medevac, television news channels 11, 13, and 45, and over 200 privately owned aircraft are based at the airport. Baltimore Air Park (White Marsh) and Essex Skypark (Back River Neck) are privately owned facilities serving small airplanes (Map 14).

Bicycle travel within the county is mostly recreational and facilities such as the Numbers Eight and Nine Trolley Trails and North Central Rail Trail are heavily used. Pedestrian travel occurs primarily within older communities that have extensive sidewalk systems and are in close proximity to businesses and schools. The Towson Urban Center is also pedestrian friendly due to its concentration of mixed uses.

One of the major challenges facing Baltimore County is accommodating the increased demands placed on its radial roadway network.

One of the major challenges facing Baltimore County's transportation system through the year 2010 will be accommodating the increased demands placed on its radial roadway network, which no longer matches predominant commuting patterns. Historically, commuter trips occurred between county suburbs and the Central Business District of Baltimore City, but the Baltimore region experienced a 17% increase in population and a 45% increase in employers between 1970 and 1995. Consequently, there has been a shift from suburb-to-city to suburb-to-suburb commuting patterns, and commuters have frequently had to adapt to circuitous and inefficient travel patterns.

Constructing an outer beltway to facilitate cross county movement is no longer being considered. It is cost prohibitive, in conflict with the county's rural strategy, and would create tremendous pressure to develop within the connected radial "spokes."

Ninety percent of all travel in the county is made in private automobiles. Residents, workers, and businesses rely upon the roadway network to provide vehicular access to a wide range of activities: shopping; day care; sporting events and recreational sites; employment; social functions; local and national markets; medical appointments; raw materials; and many other miscellaneous services and events. Two thousand nine hundred miles of roadway provide the infrastructure to serve the mobility needs of residents, but roadway capacity has not kept pace with demand. Drivers in the region spend an average of 31 hours per year in congested traffic, up from 13 hours in 1982. Traffic congestion negatively affects quality of life, and makes it more expensive to do business. In addition to the loss of time and money, congestion affects air quality. Vehicle emissions are a significant source of carbon monoxide emissions and the Baltimore region is a nonattainment area for carbon monoxide, and a severe nonattainment area for ozone. Additionally, the era of the family car has been replaced by the era of the personal car. In most two wage-earner families, each spouse commutes to a different location, relying on their own personal vehicle.

The county's dispersed suburban land use pattern has limited the ability to provide transit service to workplaces, shopping, day care, and other destinations. In addition, there is a perception among citizens that transit facilitates increased criminal activity. Recent police cooperation between Baltimore County and the MTA has enhanced public safety. Educating citizens about the benefits of transit and transportation options can assist in the success of these alternatives. Providing transportation alternatives will also benefit citizens whose ability to drive is limited, such as youths and seniors.

The county's dispersed suburban land use pattern has limited the ability to provide transit service to workplaces, shopping, day care, and other destinations.

Since the adoption of the 1989-2000 master plan, significant federal and state legislation has been adopted that has altered the way transportation strategies and projects have been implemented. Adopted legislation includes: the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA); the Clean Air Act Amendments of 1990 (CAAA); the Maryland Economic Growth, Resource Protection, and Planning Act of 1992; the Smart Growth

and Neighborhood Conservation legislation of 1997; and the Transportation Equity Act for the 21st Century (TEA21), adopted in 1998. The early federal legislation helped focus Maryland's effort to link transportation with land use. Baltimore County's commitment to participating in the regional transportation planning process meets federal requirements, and addresses state, regional, and county priorities.

The mandates identified in ISTEA have been reinforced by TEA21 and the recent state legislation, and coincide with the proposed policies of *Master Plan 2010*, including:

- Preserving and maintain the existing transportation system;
- Linking transportation strategies to land use planning;
- Giving equal consideration to non-highway projects;
- Undertaking air quality conformance analysis;
- Economic Development factors in the decision-making process;
- Making transportation strategies fiscally responsible; and
- Establishing a legitimate citizen participation process.

Master Plan 2010 recognizes the need to provide significant infrastructure investment to address the daily demands placed upon the county's roadways. This investment includes maintenance, upgrades, and congestion management strategies that have the potential to lessen demand on the system. Emphasis will be on maintenance of the existing system, and making it operate more efficiently, however, some new roads for areas, such as Owings Mills, Perry Hall-White Marsh, and the Middle River Development Area, will be required. Roadway improvements recommended in *Master Plan 2010* support growth management and land use policies by reinforcing the county's commitment to focus growth inside the URDL. The Intelligent Transportation System (ITS) initiatives for the Baltimore region will assist in maximizing efficiency of the roadway system. These initiatives, several of which are currently being implemented, will provide roadway users with routing and intermodal connection choices.

Transportation improvements will emphasize maintenance of the existing road system, and making it operate more efficiently.

While the personal automobile will remain the primary mode of transportation into the 21st century, the need to provide realistic transportation choices is becoming imperative. In the past, building more roads and adding more lanes seemed to be the solution to congestion. This approach alone is no longer environmentally, economically, or politically feasible. Alleviating or

preventing congestion is better accomplished through a combination of highway capacity improvements, management of existing services and facilities, and implementation of alternative strategies. These strategies could include encouraging telecommuting, improving transit and linkages to transit, constructing neo-traditional development and redevelopment projects, improving bicycle and pedestrian facilities and linkages, constructing additional park and ride lots, and improving the efficiency of the existing roadway network through the implementation of ITS technologies. Solutions to meeting the transportation needs of the future will likely involve a comprehensive approach using a combination of strategies.

POLICIES

- Continue existing efforts to coordinate land use and transportation planning, as has been done in the designated growth areas, so that the transportation system can accommodate potential travel demand.
- Invest in new transportation infrastructure to support the master plan economic development initiatives, like those proposed for the Middle River Employment Area.
- Continue efforts to develop a comprehensive transit system, with emphasis on improving suburb-to-suburb transit options.
- Continue to improve bicycle and pedestrian linkages within and between residential and commercial areas and transit.
- Continue to refine traffic management techniques that help to make the existing transportation system more efficient.
- Eliminate funding for road projects that support or encourage sprawl outside the URDL.
- Evaluate the County road design standards for both the urban and rural sectors.
- Develop meaningful rural road standards that maintain the rural characteristics of the non-urban part of the County.
- Develop rational road design standards for residential, commercial and industrial developments.
- Encourage time shifting by large employers to spread traffic over peak hours.

The county will continue efforts to develop a comprehensive transit system, with emphasis on improving suburb-to-suburb transit options.

ISSUES AND ACTIONS

Issues and actions relating to the county's transportation system include topics such as coordinating land use and transportation planning, developing

a comprehensive transit system, providing bicycle and pedestrian facilities, and managing traffic within communities. At the end of this section, a list of recommended transportation projects is provided. While implementing many of the recommended actions will be the responsibility of the Department of Public Works, most of them will need to be considered in light of community planning and community conservation activities.

Issue: Coordinating Land Use and Transportation Planning

The county should continue to establish and maintain land uses that support alternatives to commuting by automobile and limit suburban sprawl. This includes land use patterns, which support living near employment and transit, bicycle, and pedestrian access.

Actions

1. Plan for growth and redevelopment areas to contain a mix of commercial, residential, recreational, and institutional uses.
2. Promote a mix of land uses at transit hubs and employment centers that encourage transit and rideshare use.
3. Make transportation a component of all community and revitalization area plans and economic development strategies considering the role of transit, and other transportation alternatives.
4. Undertake parking reduction strategies for those developments with access to transit centers.
5. Plan for interconnecting streets and provide for multiple vehicular access points to communities to avoid concentrating traffic onto the collector system.
6. Strengthen the provisions of the development regulations regarding preservation of rights-of-way and clarify those provisions of the regulations regarding master plan conflict.
7. Change land use policy and design criteria to facilitate safer transit facilities; implement "Crime Prevention Through Environmental Design" techniques.
8. Coordinate transportation and land use to ensure the provision of adequate noise and visual buffers.
9. Recognize in all planning efforts the special transportation needs of people with disabilities, seniors, and youths.
10. Encourage private partnerships to increase public transit ridership and job access.
11. As part of future economic development programs for major employers, consider transportation initiatives with employer participation and

The county will promote land use patterns which support transit use.

sponsorship to encourage greater use of public transit and improve job access.

Issue: Updating Baltimore County's Functional Classification Map

Functional classification is a process of defining how individual roads fit into a system, and how the system fits into the entire transportation network. For example, the Federal Functional Classification Maps (FFCM) classify roads as interstates, principal and minor arterials, and major and minor collectors. These groups can be subclassified based on the number of trips served, the areas served, and/or their operational characteristics. Individual roads operate as one link in a hierarchical network.

Baltimore County's Functional Classification Map (BCFCM) has not been updated since 1976. In the interim, Baltimore County has been using the FFCM, which was last adopted in 1992. The purpose and objective of the FFCM is to administer the Federal Aid Highway Program. Baltimore County uses funding from this program to maintain its transportation network. It is in Baltimore County's interest to participate in updating the FFCM as necessary.

The county should adopt a separate map for land use planning purposes. This new map would use the FFCM as a base and would replace the BCFCM. The county can add subclassifications under defined federal functional classifications for local use only. This will allow the linkage of county land use and other policy decisions to the transportation system. The zoning regulations, the Comprehensive Manual of Development Policies (CMDP), and the landscape manual would refer to this new map, which would integrate land use with transportation.

Adoption of a county functional classification map will allow the linkage of county land use and other policy decisions to the transportation system.

Actions

1. Adopt and periodically update a BCFCM.
2. Evaluate potential uses for a BCFCM including:
    - criteria for locating certain land uses relative to specific road designations;
    - development of road cross-sections and other design standards based on functional classification; and
    - creating policies regarding the implementation of community traffic management strategies, parking initiatives, and the location of transit oriented developments.

Issue: Developing a Comprehensive Transit System

Baltimore County's transit system provides several local and regional transportation options, most of which are operated by the state. In addition to the facilities and programs listed below, there are a number of paratransit services, which are small transit services provided by institutions, nonprofit organizations and employers. Some paratransit services may receive state funding.

State-Operated Transit

- bus service
- light rail
- Metro
- MARC commuter rail
- ridesharing programs
- park-and-ride lots
- van services for the disabled
- future—high occupancy vehicle lanes being considered for I-695 and I-95

County-Operated Transit

- CountyRide van service for seniors and the mobility impaired.

A strong transit infrastructure enhances the quality of life for every county resident by strengthening access to employment opportunities, improving the health of the environment, contributing to the county's economic development efforts, and supporting efficient land use decisions (Smart Growth).

A strong transit infrastructure strengthens access to employment opportunities, improves the health of the environment, and supports Smart Growth.

In order to attract riders, transit service needs to provide a reasonable and convenient alternative to the personal automobile. The system must include the means for users to access the transit service from their home and destination. It is likely that a transit user will have to use more than one mode of transit to get to their destination. For example, the user may drive to a light rail stop, ride the rail downtown, catch a bus, then walk to a final destination. Intermodal connections are important when providing transit service—if the links are not continuous, it becomes inconvenient and impractical for people to use.

In addition, transit routes have been established in a radial fashion from the city into the county, with little cross-county connection. Today, more

commuters travel within the county between suburbs for work and other pursuits. The lack of cross-county transportation options promotes use of single occupant vehicles. Improvement of suburb-to-suburb transit opportunities should be investigated. This will involve greater use of intermodal connections.

Actions

1. Implement methods to make transit more usable and desirable for commuting.
2. Implement strategies to ensure the safety and well being of transit riders and the communities to which transit provides access.
3. Work with the Maryland Department of Transportation (MDOT) to develop appropriate transit services to meet the needs of the county's employers, communities, and the region.
4. Work with MTA and the State Highway Administration (SHA) to develop a system of safe, convenient park-and-ride lots to encourage use of rideshare and transit services.
5. Plan community circulation systems to effectively feed into arterial transit routes.
6. Plan for an interconnected system of streets and sidewalks to ensure easy access to transit.
7. Explore using a mix (public/private, buses/vans) of transportation providers to meet the county's transit needs.
8. Determine if taxi and private services can be utilized to generate economic and transportation benefits.
9. Work with MDOT to determine how to retrofit existing transportation facilities in community conservation areas to include or improve transit service.
10. Provide transit services to community conservation and revitalization areas to support these viable and attractive places to live, work, and shop. This effort should be undertaken with public safety as the key component.
11. Include a strong transit element in community plans and the CIP, and encourage MDOT to fund transit through its Consolidated Transportation Program (CTP).
12. Examine with MTA the feasibility of establishing mixed-use activities such as shopping, day care, small vendors and other services at park-and-ride lots, transit stations, and bus stops to encourage ridership. Also examine the provision of other amenities, such as bus shelters, benches, and public telephones.

The county will include a strong transit element in community plans and the CIP.

13. Participate in the MTA's Smart Growth Transit Program.
14. Encourage transit use, especially in the growth areas and the Towson Urban Area.
15. Encourage employees to live near their place of employment.

Issue: Ensuring the Provision and Review of Transit Facilities

The current zoning and development regulations require adequate provision of roads and their review by the county and the SHA (for state facilities); however, the same regulations require no such provision or review of transit facilities.

Actions

1. Amend the zoning and development regulations to require developers to provide facilities at transit stops where appropriate.
2. Allow the SHA and MTA to review development applications early in the development review process. Require developers to coordinate with the MTA in the early stages of a development project.
3. Examine with MTA appropriate amenities, such as bus shelters, benches and public telephones, that may be provided at park-and-ride lots and transit stops.
4. Require developers, through the established permit process, to incorporate transit-oriented site planning concepts in their projects.

The county will develop a plan for a comprehensive bicycle network that includes both on-road and off-road facilities.

Issue: Providing Bicycle Facilities

Bicycle facilities include off-road bike paths, on-road bike lanes, bicycle parking, and other facilities that make bicycling safer and more convenient such as bicycle safe storm drain grates. In 1977, Baltimore County adopted *A Bikeways Plan for Baltimore County* in response to the energy crisis of the mid-1970s. The plan designated a bicycle system, which relied primarily on shared use. The plan provided the first steps toward a comprehensive bicycle system, and should be expanded. Bicycle facilities that provide an adequate level of convenience, mobility, and safety for bicyclists at all levels of experience, and encourage bicycle trips for both recreational and utilitarian purposes, should be developed and maintained.

Actions

1. Develop a plan for a comprehensive bicycle network within the county that includes both on-road and off-road facilities, and provisions for parking.

2. Develop an outreach program to work with affected communities to resolve objections to bicycle trails, overcome misperceptions, and encourage usage.
3. Adopt consistent design standards to ensure safety and provide a pleasurable and convenient bicycle environment.
4. Construct only bicycle safe storm drain grates on all roadways.
5. Participate in local, state, federal, and private funding programs for the construction of bicycle facilities.
6. Consider concurrently constructing bicycle facilities whenever a state or county road is constructed or reconstructed. Maintenance operations, such as pavement overlays, may provide an opportunity to widen a roadway or shoulder for bicycle use.
7. Provide bicycle facilities in high-density developments, and at important origin and destination points, such as schools, shopping centers, rail stops, public facilities and major employment sites.
8. Assess the viability of bicycling as a commuting option.
9. Assist local organizations in developing bicycle facilities.

Issue: Providing Pedestrian Facilities

Pedestrian facilities include sidewalks and other types of pedestrian paths, and facilities that make walking safer and more convenient such as lighting, shelters, crosswalks, and crossing signals. Because of the heavy reliance on mobility by automobile, pedestrian needs are often overlooked. Pedestrian facilities can provide practical alternatives to the automobile by providing linkages from communities to local businesses and to local transit options. In addition to health benefits, walking provides citizens with an opportunity to spend more time in their community getting to know their neighbors. Establishing community ties in this manner enhances community conservation efforts.

Because of the heavy reliance on mobility by automobile, pedestrian needs are often overlooked.

Baltimore County and the state have been constructing new and redeveloped pedestrian facilities throughout the county. Many of these projects are part of road development/redevelopment projects, but are often simply improvements to existing systems. An extensive streetscape program was recently completed in the Towson Urban Center, which included paving, lighting, and landscape improvements. Recreational systems, such as the Patapsco Park trail and greenway projects are also underway. Pedestrian facilities that provide desirable levels of accessibility and safety for pedestrians, and encourage walking for both recreational and utilitarian purposes, should continue to be developed and maintained.

Actions

1. Adopt a coordinated county policy for pedestrian facilities.
   - Require pedestrian facilities in all new development and redevelopment projects, in accordance with adopted design standards.
   - Include a pedestrian element in all community plans. Identify important origin and destination points, such as residential collector streets, schools, colleges, transit stops, shopping centers, libraries, post offices, and parks, and assess the need and feasibility of providing or improving sidewalks.
2. Coordinate with the Department of Public Works to adopt consistent design standards that ensure a safe, pleasurable, and convenient pedestrian environment. Incorporate those standards into the CMDP. Include standards for the following:
   - site design that encourages pedestrian use;
   - standards for walkway width, considering the amount of foot traffic and potential obstacles, such as utility poles;
   - facilities to improve safety such as crosswalks, pedestrian signals, raised medians, and lighting;
   - flexible design standards, which complement the existing or proposed design style of the area; and
   - design elements to encourage and support pedestrian activity such as special paving, landscaping, and street furniture (such as trash receptacles, bus shelters, benches, newspaper boxes, telephones).
3. Continue to complete missing links in the existing sidewalk network and create new connections in development and growth areas.
4. Install pedestrian crossing signage and strictly enforce pedestrian crossing laws.

Increased traffic volumes and vehicular speeds have negatively impacted the livability of many residential communities.

Issue: Managing Traffic within Communities

As congestion along the highway network has grown in frequency, magnitude, and duration, resourceful motorists have found bypass routes through local residential streets. Aggressive driving and a diminished respect for other motorists, pedestrians, traffic control devices and general "rules of the road" have become more common. Increased traffic volumes and vehicular speeds have negatively impacted the livability of many residential communities. Mitigation measures should be taken to ensure that community streets remain safe and compatible with the respective community.

Actions

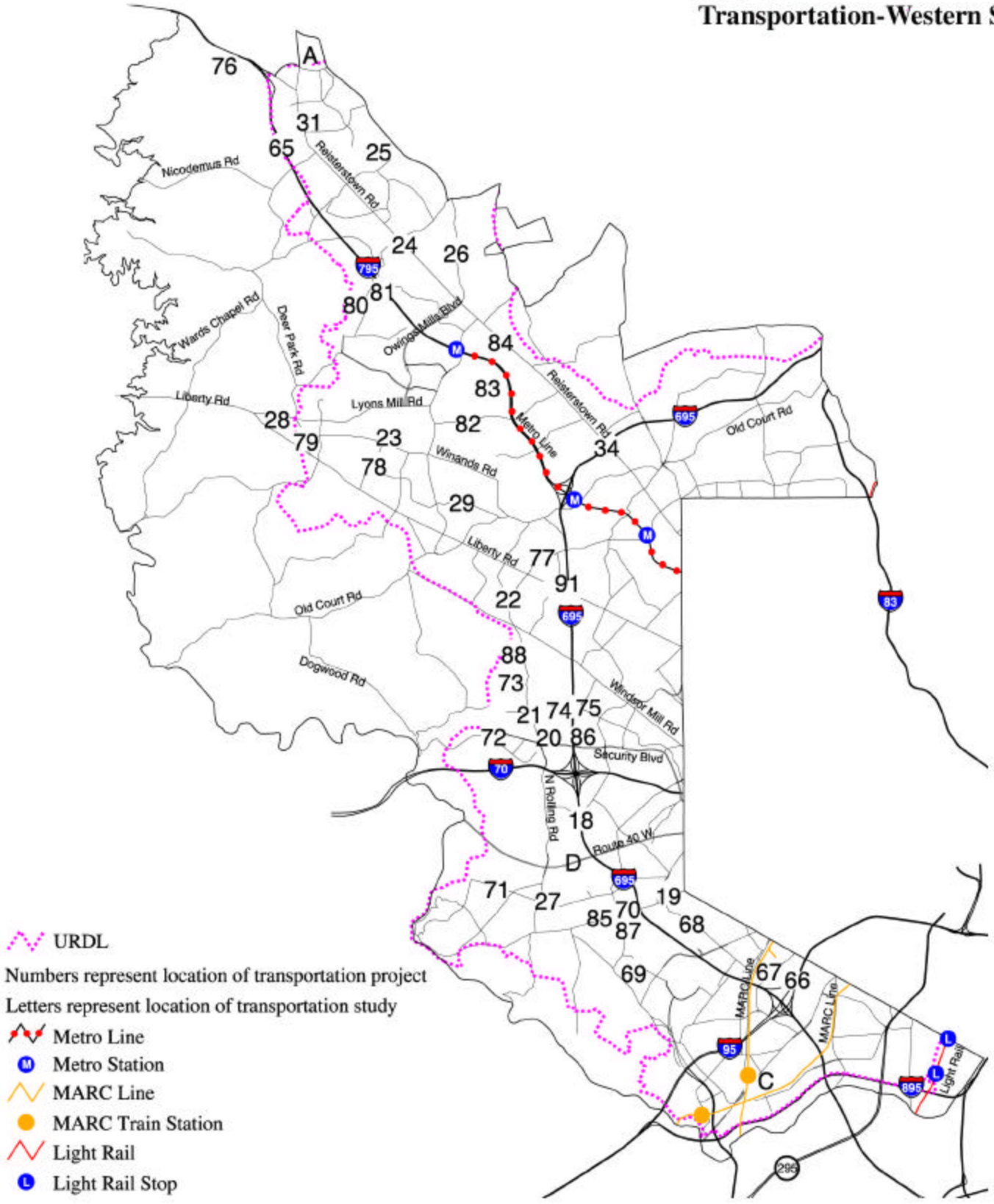
1. Ensure that the essential elements (links) of a highway network are in place to adequately serve travel demand.
2. Maintain and improve operational efficiency of the arterial and collector roadway at a level sufficient to diminish incentive for "short cutting."
3. Working with affected communities, utilize appropriate traffic engineering strategies to manage traffic patterns in neighborhoods and to direct through traffic to remain on arterial and collector roadways.
4. Adopt traffic regulations sufficient to permit the safe operation of all roadways.
5. Encourage community participation in neighborhood based strategies to change behaviors of "local" drivers.
6. Address more serious and ongoing problems through aggressive enforcement and public information strategies including traffic calming techniques and the examination of new technologies with the potential for increased efficiency.

TRANSPORTATION PROJECTS AND STUDIES

The transportation projects and studies identified below are intended to improve the county's transportation network under the established criteria for meeting future transportation needs. Projects identified in the master plan have preference for funding over projects not identified in the master plan. Additionally, Baltimore County intends to protect the necessary right-of-way for these transportation projects.

The transportation project list begins on page 96. The projects are divided into "projects in capital program" and "projects not in capital program" categories. The projects listed under "projects in capital program" are currently funded in Baltimore County's Capital Improvement Program (CIP) or the Maryland Department of Transportation's Consolidated Transportation Program (CTP). Projects listed under "projects not in capital program" are not currently funded in either capital program just mentioned. Transportation maps 12, 13, 14, and 15 show the general location for all transportation projects listed.

Map 12
Transportation-Western Sector



URDL

Numbers represent location of transportation project

Letters represent location of transportation study

- Metro Line
- Metro Station
- MARC Line
- MARC Train Station
- Light Rail
- Light Rail Stop

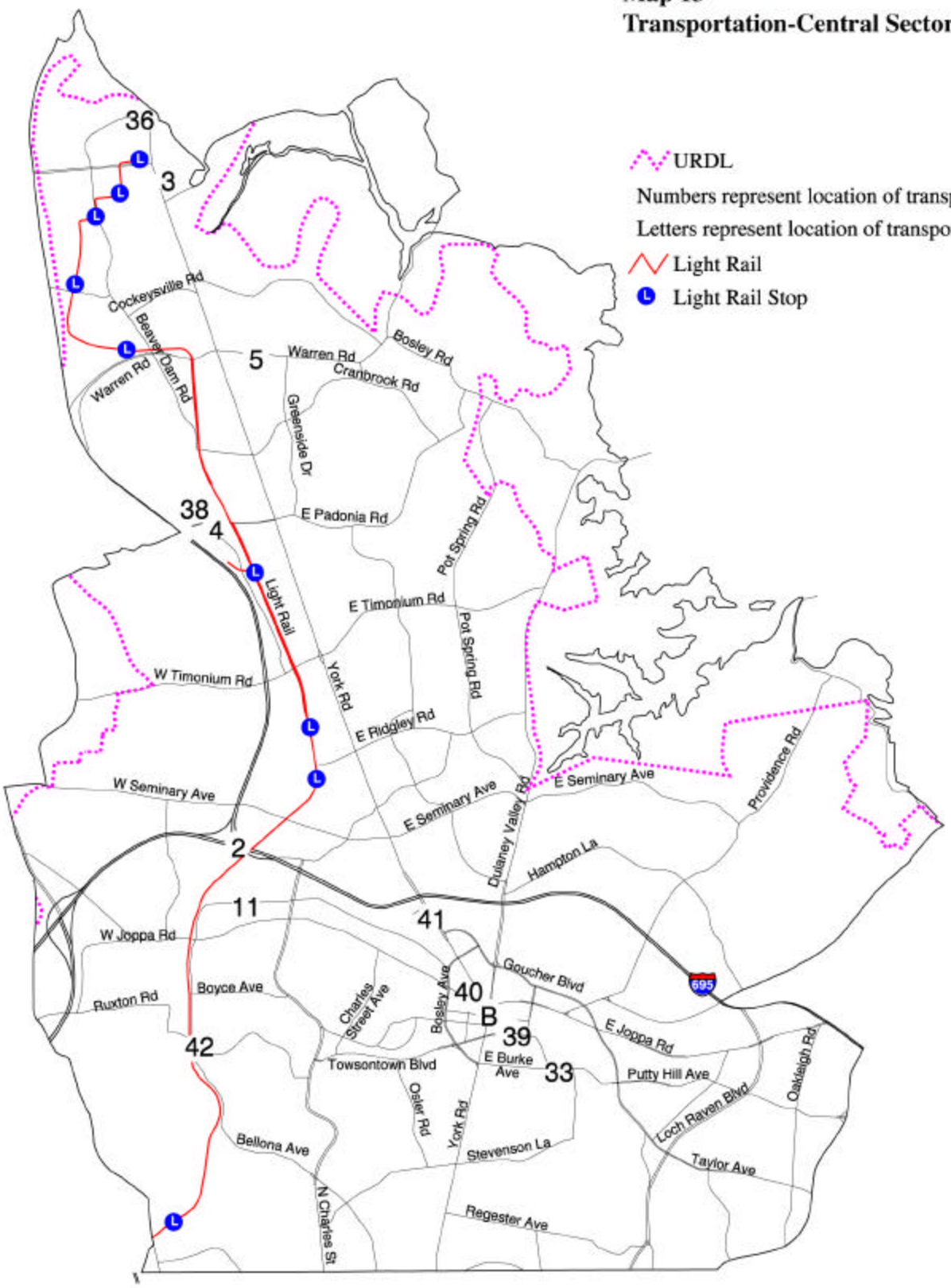
N

1 0 1 2 3 Miles

Data Sources:
URDL: Baltimore County Office of Planning (1:24000)
Transportation Projects: Bureau of Traffic Engineering
Roads: Baltimore Metropolitan Council (1:24000)

Baltimore County Office of Planning
OIT - GIS Services Unit

Map 13
Transportation-Central Sector



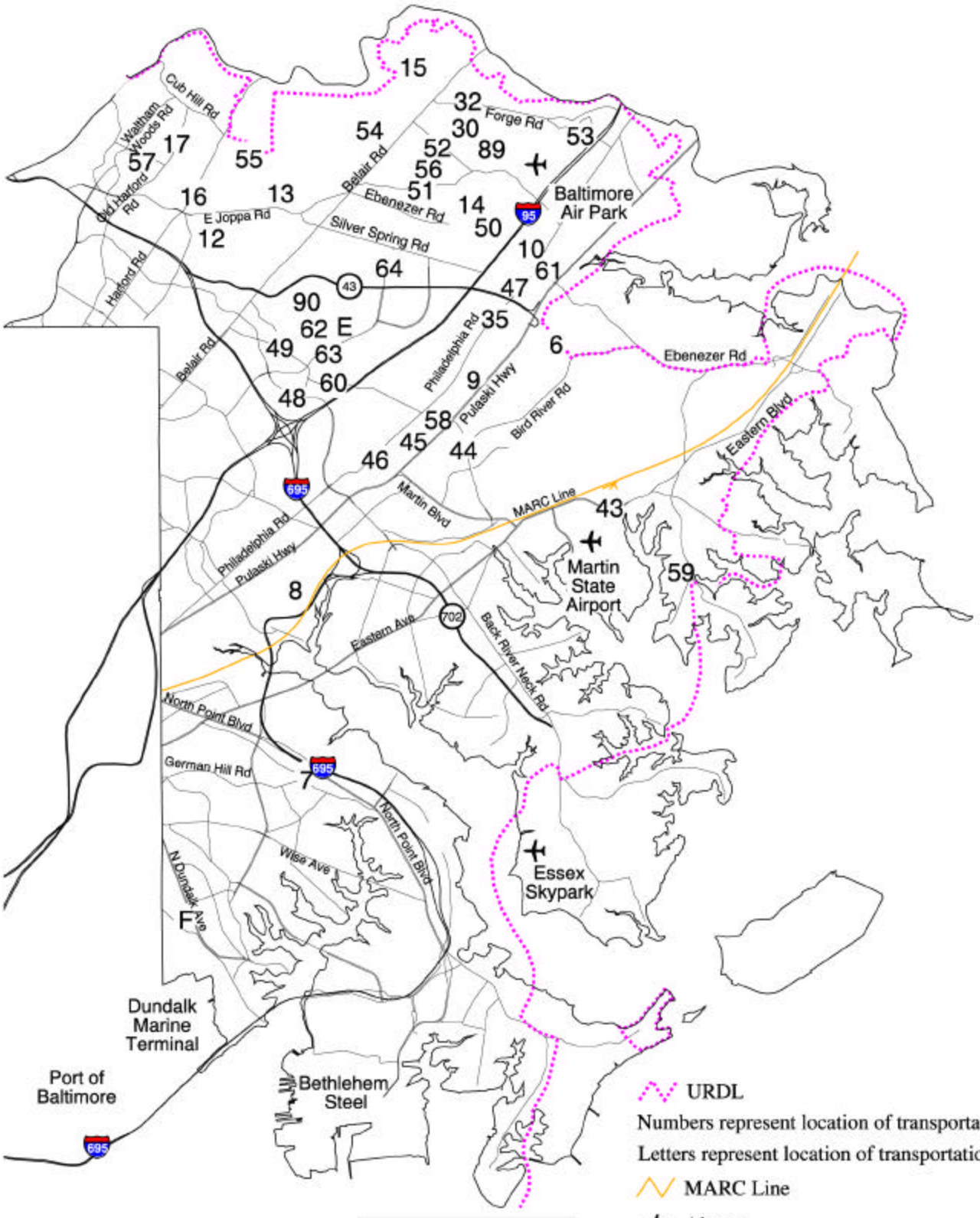
Data Sources:
URDL: Baltimore County Office of Planning (1:24000)
Transportation Projects: Bureau of Traffic Engineering
Roads: Baltimore Metropolitan Council (1:24000)

Baltimore County Office of Planning
OIT - GIS Services Unit

N

0.5 0 0.5 1 1.5 2 M

Map 14
Transportation-Eastern Sector



URDL
Numbers represent location of transportation projec
Letters represent location of transportation study
MARC Line
Airport

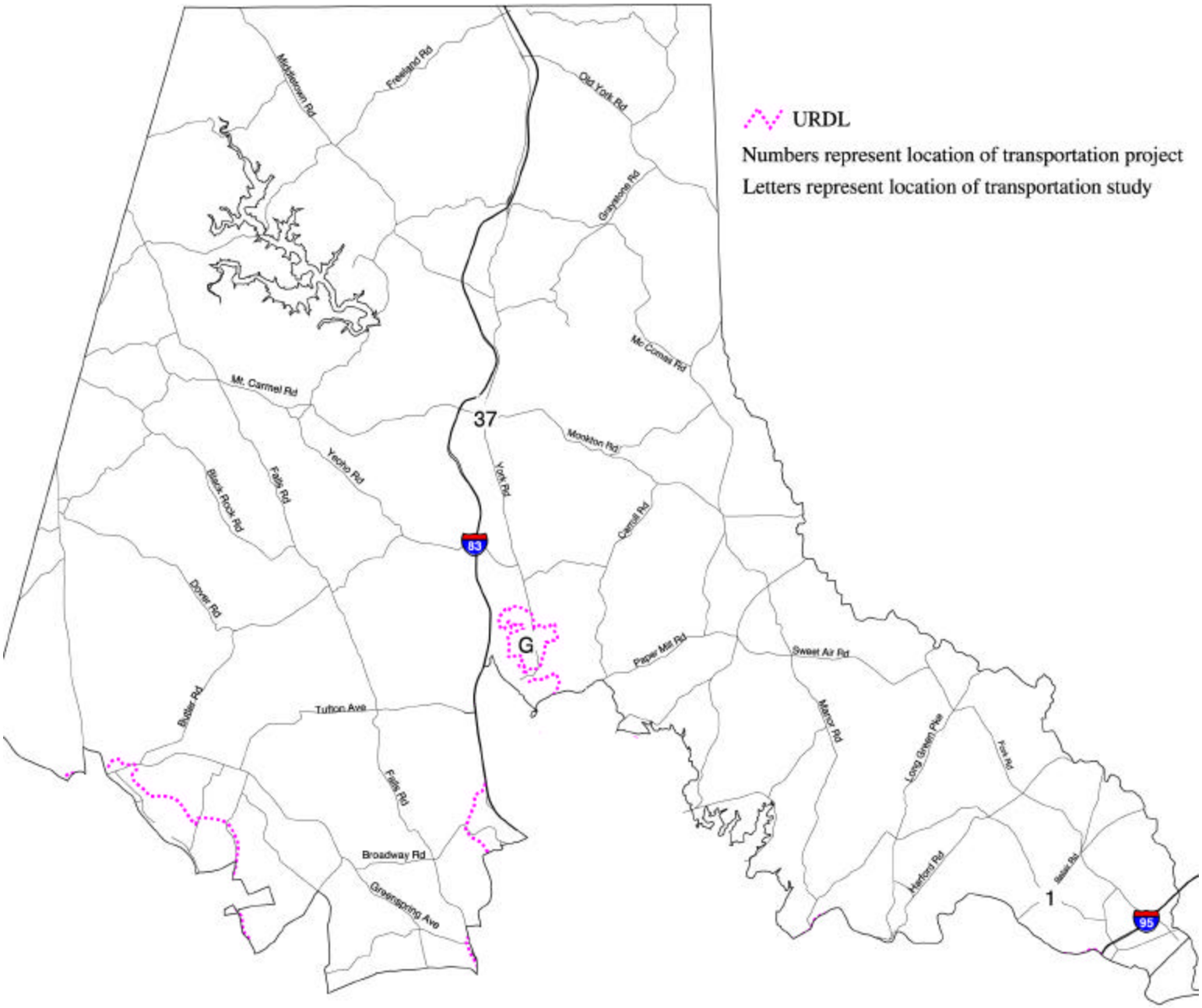
N

1 0 1 2 3 Mile

Data Sources:
URDL: Baltimore County Office of Planning (1:24000)
Transportation Projects: Bureau of Traffic Engineering
Roads: Baltimore Metropolitan Council (1:24000)

Baltimore County Office of Planning
OIT - GIS Services Unit

Map 15
Transportation-Northern Sector



Data Sources:
URDL: Baltimore County Office of Planning (1:24000)
Transportation Projects: Bureau of Traffic Engineering
Roads: Baltimore Metropolitan Council (1:24000)

Baltimore County Office of Planning
OIT - GIS Services Unit

Table 14
PROJECTS IN CAPITAL PROGRAMS

Work Type

C = Construct
S = Study
U = Upgrade
W = Widen
R = Replace

PROJ. NO.	PROJECT NAME	LOCATION	WORK TYPE
1	Belair Road	White Marsh Boulevard to Harford County	W
2	Baltimore Beltway	Harrisburg Expressway to I-95	W
3	Paper Mill Road	Hunters Run Drive to York Road @ Shawan Road	C
4	Padonia Road	Deereco Road to York Road	U
5	Warren Road	York Road to Reservoir Property	U
6	White Marsh Boulevard	Pulaski Highway to Eastern Avenue	C
7	Trappe Road	North Point Road to North Point Boulevard	C
8	Kelso Drive	CSX to Pulaski Highway via Todds Lane	C/U
9	Campbell Boulevard	Philadelphia Road to White Marsh Boulevard ext.	C
10	Ebenezer Road	Realign at Cowenton Avenue	C
11	Bellona Avenue	Ruxton Crossing Road to Ridervale Road	U
12	Ridgely Avenue	Joppa Road to Orbitan Road	U
13	Walther Boulevard	Proctor Lane to Joppa Road	C
14	Honeygo Boulevard	Ebenezer Road to Belair Road	C
15	Gunview Road	North of Klausmier Road to Belair Road	C
16	Proctor Lane	Skylark Court to Harford Road	C
17	Old Harford Road	Matthews Drive to Cub Hill Road	W
18	Baltimore Beltway	I-95 to I-70	W
19	Symington Avenue	Frederick Avenue Northerly	U
20	Lord Baltimore Drive	Security Boulevard to Dogwood Road	C
21	Dogwood Road	Rolling Run Drive to Belmont Avenue	U
22	Rolling Road	Windsor Boulevard to Liberty Road	W
23	Owings Mills Boulevard	Lyons Mill Road to Liberty Road	C
24	Dolfield Boulevard	Northwest Expressway to Reisterstown Road	C
25	Cherry Hill Road	Extend to Owings Mills Boulevard	C
26	Owings Mills Boulevard	North of Crondall Lane to Bonita Avenue to Kendig Mill Road	W
27	Oakdale Avenue	Edmondson Avenue Northerly	U
28	Lyons Mill Road	Painters Mill Road to Liberty Road	W
29	Church Lane	McDonogh Road to Old Court Road	U
30	Cross Road	Forge Road to Chapel Road	W
31	Bond Avenue	New Avenue Easterly	U
32	Forge Road	Cross Road to Forge View Road	W
33	Hillen Road	Stevenson Lane to Fairmount Avenue	W
34	Baltimore Beltway	Interchange @ Reisterstown Road	U
35	Philadelphia Road	Campbell Boulevard to White Marsh Boulevard	U

Table 15
PROJECTS NOT IN CAPITAL PROGRAMS

Work Type

C = Construct
S = Study
U = Upgrade
W = Widen
R = Replace

PROJ. NO.	PROJECT NAME	LOCATION	WORK TYPE
36	York Road	Bridge over Western Run	R
37	Monkton Road	Relocation with Mt. Carmel Road	C
A	CSX Rail Commuter Study to Carroll County		S
38	Harrisburg Expressway	Interchange @ Padonia Road	U
39	Virginia Avenue	Pennsylvania Avenue to Joppa Road	U
40	Washington Avenue	Ware Avenue to Joppa Road	U
41	York Road	Bosley Avenue to Baltimore Beltway	U
42	Central Light Rail Line	Double Track	U
B	Towson Transit Access		S
43	Eastern Avenue	Martin Boulevard to White Marsh Boulevard	W
44	Transverse Road	Extend to Bird River Road	C
45	Yellow Brick Road	Extend to Middle River Road	C
46	Lennings Lane	Extend to Yellow Brick Road	C
47	Philadelphia Road	White Marsh Boulevard to Cowenton Avenue	U
48	Rossville Boulevard	Lillian Holt Drive to I-95	W
49	Ridge Road	Belair Road to Babikow Road	U
50	Cowenton Avenue	Joppa Road to Philadelphia Road	W
51	Joppa Road	Belair Road to Philadelphia Road	U
52	Chapel Road	Belair Road to Joppa Road	W
53	Forge Road	Forge View Road to Pulaski Highway	W/C
54	Klausmier Road	Gunview Road to Belair Road	U
55	Northwind Road	Harford Road to Walther Boulevard	W/C
56	Snyder Lane	Joppa Road to Chapel Road	W
57	Perring Road	Waltham Woods Road to Summit Road	C
58	Middle River Road	Philadelphia Road to CSX	U
59	Carrollwood Road	Extend to Clarks Point Road	C
60	Babikow Road	Ridge Road to King Avenue	U
61	Ebenezer Road	Philadelphia Road to Pulaski Highway	U
62	Bucks School House Road	Ridge Road to Perry Hall Boulevard	U
63	Perry Hall Boulevard	Rossville Boulevard to Honeygo Boulevard	W
64	Perry Hall Boulevard	Southfield Drive to Silver Spring Road	W
65	Northwest Expressway	Owings Mills Boulevard to Reisterstown Road	W
66	Vero Road	City Line to Washington Boulevard	C
67	Benson Avenue	City Line to Baltimore Beltway	U
68	Maiden Choice Lane	Wilkens Avenue to Frederick Road	U
69	Valley Road	Hilltop Road to Wilkens Avenue	W
70	Frederick Road	Rolling Road to Baltimore Beltway	U
71	Rockwell Avenue	Chalfonte Drive to Old Frederick Road	U
72	Security Boulevard	HCFA to Fairbrook Road	C

Table 15 Continued
PROJECTS NOT IN CAPTITAL PROGRAMS

Work Type

C = Construct
S = Study
U = Upgrade
W = Widen
R = Replace

PROJ. NO.	PROJECT NAME	LOCATION	WORK TYPE
73	Fairbrook Road	Extend to Windsor Boulevard	C
74	Lord Baltimore Drive	South of Ambassador Road to Dogwood Road	C
75	Dogwood Road	Lord Baltimore Drive to Woodlawn Drive	U
76	Westminster Pike	Carroll County Line To Northwest Expressway	W
77	Milford Mill Road	Liberty Road To Washington Avenue	U
78	Allenswood Road	Southall Road To Collier Road	C
79	Deer Park Road	Liberty Road To Lyons Mill Road	W
80	Dolfield Boulevard	Northwest Expressway To Lyons Mill Road	C
81	Northwest Expressway	Interchange At Dolfield Boulevard	C
82	McDonogh Road	Painters Mill Road To Reisterstown Road	W
83	Red Run Boulevard	Extend To McDonogh Road	C
84	Reisterstown Road	Baltimore Beltway To Glyndon Drive	W
85	Orban Avenue	Extend to Egges Lane	C
86	Whitehead Road	Woodlawn Drive to Security Boulevard	U
87	Bloomingdale Avenue	Bloomsbury Avenue to Bishops Lane	U
88	Windsor Boulevard	Clays Lane to Fairbrook Road	C
C	Southwest Commuter Rail		S
D	Western Transit Study		S
89	Honeygo Collector	Forge Road to Chapel Road	C
E	White Marsh Transit Access		S
F	Dundalk Transit Access		S
90	White Marsh Road	Bucks School House Road to Perry Hall Easterly	U
G	Loveton Access Study		S
91	Baltimore Beltway	Interchange @ Liberty Road	U